MENTARY AFFAIRS (SHRI P. R. KUMARAMANGALAM) : (a) and (b) Yes, Sir, Thorium in its natural form does not contain any Uranium-233. However, when irradiated in a nuclear reactor, part of Thorium gets converted into Uranium-233 which can be recovered.

(c) to (e) Research and Development towards utilisation of Thorium for energy production is being actively pursued in the Department of Atomic Energy. A small reactor based on Uranium-233 has beew built by the Bhabha Atomic Research Centre. The initial core of the first unit of Kakrapar Atomic Power Project has been loaded with Thorium bundles to achieve power flattening.

Achievements of the Atomic Research Institute

493. SHRI TINDIVANAM G. VENKATRAMAN : Will the PRIME MINISTER be pleased to state :

(a) what have been the consolidated achievements of various research institutes of Atomic Energy in the country; and

(b) what are the norms fixed for selection of scientists in Atomic Research Institutes and number of the Scientists of foreign countries employed in these research institutions' ?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF OCEAN DEVELOPMENT AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI P. R. KUMARAMANGALAM) : (a) From the early 50s with the setting up of iAtomie Energy Establishment, Trombay, India has been able to develop the full fuel cycle. The Atomic Research Institutes have developed indigenous technology from stage of prospecting for uranium * and thorium ores, mining of the ores, fabrication of fuel, design, construction and operation of power reactors, reprocessing of spent fael and waste disposal. A fast breeder bu*t* reactor has been commissioned and is being operated. Several use of isotopes and nuclear technology in agriculture, medicine and industry have also been developed. Apart from these, indigenous technologies, have been developed in high tech and frontier areas of science, such as lasers, accelerators, high temperar Hire superconductivity, cryogenics, robotics, electronics, computer sciences, gene-lie engineering and sodium technology.. A number of technologies in nuclear and other areas have been transferred to private industry and public sector undertakings.

(b) Scientists and Engineers are selected every year from a large number of First Class M. Sc. Degree holders' with not less than 60% marks and[1] Graduate Engineers with not less than 65% marks after a written test and *viva-voce* and given one year orientation course or in-plant training in. nuclear sciences and engineering prior to their appointment. From, the year 1991-92, M. Tech. Graduates in selected specialised areas are being recruited for placement in various divisions. Some exceptional Ph.Ds. from Indian and Foreign Universities are also recruited' after careful consideration *on* a case-to-case basis. No. scientist from any foreign country is emp'oyeu in any of the research institutes under the Department of Atomic Energy.

LSI Spies in Bare, HP and BP

494. SHRI VIREN J- SHAH : Will the PRIME MINISTER be pleased to state :

\a.t whether Government's attention lias bean drawn, to a report which appeared in the Sunday Observer of October 25, 1992 under the caption "Inter-services Intelligence Agency of Pakistan (ISI) Spies in BARC, HP and BP";

(b) if so, what are the details in this regard: and

(c) what preventive action Government have taken to check the objectionable activities of ISI and safeguard our vital atomic installations ?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF